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CULTURAL COMMONS IN NON-TRADITIONAL AND TRADITIONAL  
SECONDARY EDUCATION: A MEDIA ECOLOGY APPROACH

by

ANTHONY BAERGA, B.A. UNIVERSITY OF TEXAS AT SAN ANTONIO

THESIS

Presented to the Graduate Faculty of

University of the Incarnate Word

in Partial Fulfillment

of the Requirements

for the Degree of

MASTER OF ARTS

UNIVERSITY OF THE INCARNATE WORD

December 2013

CULTURAL COMMONS IN NON-TRADITIONAL AND TRADITIONAL  
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APPROVED:

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Dr. Enrique Esquivel-Lopez Chairman of Committee

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Dr. Trey D. Guinn Committee Member

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**MASTER OF ARTS**

**December 2013**

**Major Subject: Communication Arts**

## ABSTRACT

### Cultural Commons in Non-Traditional and Traditional Secondary Education: A Media Ecology Approach

Anthony Gabriel Baerga, M.A. University of the Incarnate Word

Based on the theory of media ecology, this study explores the cultural commons between traditional and non-traditional education in secondary schools. Postman's study of media ecology presents the notion that media technology plays an integral part in society and cannot be overlooked; more so, technologies should be used as an ecological learning tool to balance education systems (Postman 1992). Within the past four years, U.S. education witnessed over 100,000 students leave the traditional classroom to embark on a virtual education journey (Miron, Horvitz, and Gulosino, 2013). The purpose of this exploratory study is to examine how teachers create a media ecosystem in their own classroom environments. Findings from the current study suggest meaningful and sustainable strategies for strengthening learning communities in traditional and non-traditional secondary school systems. Future research will highlight areas of improvement needed for creating a more cohesive integration program for all educators.

## VITA

Anthony Gabriel Baerga was born in San Antonio, Texas, on April 6, 1987, to Grisselle Damaris Baerga and Luis Rafael Baerga. He is a graduate of Clark High School and completed a Bachelor of Arts in Public Relations from the University of Texas at San Antonio in 2011. Anthony is a hotel food and beverage manager at the Eilan Hotel Resort and Spa in San Antonio, Texas. In January 2012, he entered the graduate program in communication arts at the University of the Incarnate Word.

Permanent address: 14838 Vance Jackson Road Apt. 404  
San Antonio, Texas 78249

This thesis was typed by Anthony G. Baerga

## Table of Contents

Abstract.....	iii
Vita.....	iv
Introduction.....	1
Relevance of Study.....	4
Statement of Purpose.....	6
Review of Literature.....	7
Knowledge and Skills of Educators.....	8
Attitudes, Behaviors, and Pedagogical Beliefs of Educators.....	11
“The Medium is the Message:” Introduction to Media Ecology.....	14
A Brief History in Traditional Education.....	16
Dialing in on New Media Integration.....	18
Current Study.....	22
Approach.....	22
Methods.....	24
Participants and Procedures.....	24
Measures.....	26
Analysis and Results.....	28
Media Ecology.....	28
Types of Thinking.....	30
Cultural Commons.....	32
Discussion and Future Direction.....	33
The Role and Nature of Techno-Centric Teaching.....	33



Educating the Masses.....	34
Creating Cooperative Educators.....	35
Limitations.....	35
Suggestions for Future Research.....	37
Conclusion.....	38
Appendices.....	40
Survey.....	40
Glossary.....	42
Traditional and Constructivist Model of Education.....	45
Works Cited.....	46
Works Consulted.....	51

## Introduction

This research is focused on media ecology, the study of media environments and media cultures. Whereas McLuhan is often credited for introducing the theory of media ecology (Anton, 2011; Gencarelli, 2000; and Lopez, 2012), Postman, Strate, and other contemporary communication scholars have since helped modernize it (Gencarelli, 2000; Lopez, 2012). Media Ecology seeks to find how media of communication affects one's "perception, understanding, feeling, and values; and how our interactions with media facilitates or impedes our chances of survival" (Postman, 1992). To survive, humans must often change and adapt. Though changes are often executed at the individual level, "one significant change generates total change" in any given culture (Postman, 1992). This is evident in examining how technology integration at the societal level impacts the integration in nearby school systems (Clarke et. al., 2012; Hew et. al., 2006). "A new technology does not add or subtract something. It changes everything" (Postman, 1992). "Surrounding every technology are institutions whose organization--not to mention their reason for being--reflects the world-view promoted by technology" (p.18). The integration of a single technological device (e.g., iPad, App, tablets) has enormous implications on humans engage politics, their household environment, their education systems, their local churches, and beyond.

This present study will contribute to contemporary literature about media ecology, and follows the premise that media technologies cannot be ignored. Moreover, as young people grow and develop in a techno-centric society, educational systems must work diligently to transition effectively toward a balanced media ecosystem (Lopez, 2012).

The importance of knowing how technology alters one's "conception of learning" (p.19), and one's interpretation of understanding is vital to the success of each classroom. "New technologies alter the structure of our interests: the things we think about. They alter the character of our symbols: the things we think with. And they alter the nature of community: the arena in which thoughts develop" (P.20). This research will use the following symbols to provide relevance to this theory: New technologies often become the medium to find easy access to "the things we think about," technological/media devices become the "character of our symbols, the things we think with" and educators develop the role of the "nature of community, the arenas in which thoughts develop," such as classrooms. Similar to the evolution of a caterpillar into a butterfly, technology has become a developmental tool for societal growth.

Advancing this notion of technologies becoming more a part of one's environment rather than just a tool, McLuhan contends with society debating "we extend our senses into media" (Lopez, 2012). This single statement defines the importance of studying media as a cultural ecosystem in various aspects of life. His argument sits on the bases of known connections:

The phone extends the ear and voice. The telescope and microscope expand our vision. But when we enlarge ourselves externally, we simultaneously numb ourselves locally. We "autoamputate" our senses as we turn them over to media technologies. A simple example is that we unlearn math when we use calculators (p.97).

What is media ecology and its interrelationship with the differences between traditional and non-traditional educators? Media ecology is the understanding that media

plays a large role in society. The integration of media into one's daily life is inevitable. Classrooms just like society have become a subject of change. A brief change in the education of students with these technological developments is not sufficient; technologies demand complete change. The understanding and beliefs on this topic will directly assist in the balancing attempt in pedagogical beliefs between traditional and non-traditional educators in secondary schools; this theory provides understanding of how balance can be achieved. Media ecology has been at the forefront of this research and helped develop a need to better understand the differences amongst educators and how the understanding of these differences can help create a more responsible media ecosystem within classrooms.

This research matured with emphasis on two intact cultures and the commonalities they possess. The perpetual development of cultures within society; whether the melting pot known as the United States of America, the diversity within school systems, or the ever changing development of new media technology, cultural evolution and consideration needs to be seen as a developmental tool to education success.

The inspiration for this study transpired from the framework of Dr. Antonio Lopez a media educator dedicated to the sustainability of education and its systems. He explains a concept utilized at the forefront of this research, "cultural commons" as the "space of ideas that everyone shares." Often overlooked by preconceived thoughts on specific subjects, these commons regularly become opaque to the human eye. The discussion and understanding of traditional and non-traditional educators will be developed utilizing this framework. Madison, Frischmann, and Strandburg 2008

introduce cultural commons with the following statement emphasizing on cultural importance:

Cultural production is an inherently social phenomenon, taking place over a wide range of scales and within a complex, overlapping variety of formal and informal institutional structures... Social production of cultural goods has become more salient and more economically important as a result of globalization and the communications revolution symbolized by the Internet. (p. 669)

These three social science experts explain cultural commons as “environments for developing and distributing cultural and scientific knowledge through institutions that support pooling and sharing that knowledge in a managed way” (p. 817). Each culture and/or sub culture practices individual tasks differently, although these tasks are executed or believed to be different from one another, similarities often arise in the main message of multiple cultures. These similarities are known as the cultural commons. The researcher utilizes this knowledge to develop framework for primary research, a survey to analyze, and the following review of literature to highlight the differences amongst these education cultures in an attempt to find the commonalities in the cultures to promote a more intact media ecosystem in schools.

#### **RELEVANCE OF STUDY**

When one takes a look into the classroom, a large percentage of students fit into a category of society that scientists have deemed the millennials. More electronically and media intelligent, these students develop a whole new culture for our educators, workforce, and society. These cultural implications have developed and transitioned into schools. The importance of adaptation in education cultures with the times proves just as

important as it has been made evident in society. Media ecology presents the notion of media becoming an integral part of education cultures and one of the only factors that will create balance within the classroom (Lopez, 2004).

In order to better understand the importance of this study on new media integration, one must look outside of the classroom. It takes an army to study the drastic change in students over the past 10 years and the educational resources, which have been developed immensely during this time. Often, one realizes society develops faster than expected, it is important that educators keep up with this development. Educators are the ones preparing students to take over what mentors, teachers, and forefathers have started in the most efficient and civil way. This will only be achieved through a cohesive cultural unit of educators willing to erase as many educational boundaries possible and put the common good of students first.

As introduced in the prior chapter, this study will utilize the lens of a developmental theory known as media ecology to lay the framework for this research study and future research on this growing topic of new media technology in the classroom. This theory will be used to develop and research the difference between the two sub-cultures of traditional vs. non-traditional teachers in order to better understand where they fit in the framework of educational environments and how we can better understand the cultural differences amongst them to find common ground. Just like students, educators are known to shut down when they don't believe their lessons directly influence their students in a beneficial and educational manner. In order to effectively reach students, balance has to be found between each type of educator.

Classrooms are more equipped then yesterday and developmental tools are being created every year; it is time for technology to become more of an out of the box cultural developmental experience for educators rather than a standardized use of PowerPoint and Internet.

#### **STATEMENT OF PURPOSE**

Over the past four years, 100,000 secondary school students transferred from the traditional classroom to a completely virtual experience. This amounts to 25,000 students a year (Miron, Horvits, & Gulosino, 2013). This growing population of virtual learners suggests that traditional education may be changing. The purpose of this study is to explore the cultural commons of traditional and non-traditional educators at various schools within the North Side and North East Independent School Districts of San Antonio Texas. Cultural implications will be interpreted from the perspective of media ecology. This research seeks to understand how teachers create a media ecosystem in their own environments by understanding the advantages and disadvantages they see in new media adoption in secondary schools. For the purpose of this research, traditional teachers are defined as those who utilize the minimum amount of technologies (i.e. power point & internet) to support lectures in the classroom and non-traditional teachers are defined as those who utilize more advanced technologies as their classroom environments through the use of various platforms and devices (e.g. iPad, iPhone, social media sites, Apps, etc.). At the end of the study, the category of “cultural commons” will be used to analyze the information provided by the informants. Based on the findings, the researcher intends to suggest beneficial ways to strengthen sustainable learning communities in both systems.

## **Review of Literature**

Research suggests that there is a wide range in how educational cultures integrate media into curriculum (Abbitt 2011; Anton 2011; Clarke & Zagarell 2012). While many educational institutions have the technology and resources, not all educators are implementing them. Therefore, the range in how educational cultures integrate media is largely due to individual educators and their teaching-style. Yet little work has been done to show how educators on both sides of the spectrum (traditional & non-traditional) view new media integration into curriculum. Researchers understand students' needs and wants from their education, and they understand the tools needed to transition educational learning into this new curriculum standard (Ertmer & Ottenbreit-Leftwich 2010; Ito et. al. 2008). Although these cultures are understood, there is still an imbalance in education due to the lack of knowledge of educators' pedagogical approaches. Thus, understanding the educators and their position on integrating media into the classroom will provide insights to be used for improving the educational ecosystems.

This study will utilize the theory of Media Ecology to develop and understand the importance of creating balance within schools with traditional and non-traditional educators at the forefront. This theory seeks to bring environments together to better develop a more sustainable media ecosystem through empirical surveys (Lopez, 2012). Lopez suggests, sustainability of media ecosystems is only possible with the understanding of cultures and subcultures within a given establishment and finding balance amongst each participant. Media ecology is the understanding that media plays a large role in society (Postman, 1992). No matter what one believes, the integration of media into every day lives is inevitable (18). Classrooms just as society have become an



arena of change. A brief change in the education of students with the development of these technologies is not enough; these technologies demand complete change. Media ecology seeks to find balance in every aspect of the integration process of these resources into our schools (Gencarelli, 2000). In an effort to find what is necessary to create a sustainable media ecosystem in the classroom, we first need to observe, analyze, and understand the individuals in charge of classroom mediation; educators (Lopez, 2012).

This research seeks understanding of the obstacles educators have overcome and will analyze differences amongst traditional and non-traditional cultures to create framework for future research. Becker (2000), Ertmer (2005), and Clark et. al. (2012) found common ground for issues initially faced by school systems such as obtaining necessary resources, improving knowledge and skills of educators, and limiting institutional obstacles. According to Becker (2000), technology serves an integral role in the value and function of education systems, especially “in schools and classrooms in which teachers: (a) have convenient access, (b) are adequately prepared, and (c) hold personal beliefs aligned with a constructivist (non-traditional) pedagogy” (p.29). It is important to understand the knowledge of educators and their pedagogical beliefs in order to strengthen my empirical research on these cultural groups.

#### **KNOWLEDGE AND SKILLS OF EDUCATORS**

Knowledge and skills needed to perform daily tasks are important in any field of work. Administrators’ understanding of the importance of technology in society led to schools obtaining more up to date resources: the first step in an attempt to create balance between classroom education and real world knowledge (Becker, 2000; Clarke & Zagarell, 2012; Ertmer & Ottenbreit-Leftwich, 2010). Once the technologies were

accessible to educators, administrators pushed toward a faster integration of new media technologies into classrooms (Gencarelli, 2000). As with any new way of conducting business, this new teaching approach witnessed its share of ups and downs.

Although technology became more prevalent in schools, the integration process started at a slow pace, but in no time educators noticed it moved quicker than ever expected eventually creating issues in their ability to keep up with changes. When educators obtained the majority of needed resources, they lacked knowledge on how or where to properly begin using them (Clarke & Zagarell, 2012; Fedorov, 2013). Although many wished the resources would fix all educational problems themselves, the lack of understanding of these devices led to a decline in educational effectiveness.

The lack of technological skills presented by educators became a large barrier in the implementation process. K.F. Hew and T. Brush (2006) found that this lack of “specific technology knowledge and skills, technology-supported pedagogical knowledge and skills, and technology-related-classroom management knowledge and skills” created larger barriers than expected. Educators found themselves in their classrooms with students excited and engaged in their lessons and soon realized they lacked understanding of the tangible technological resources and how to properly navigate through lessons. The lack of education on these resources led to down time in classrooms for students and to frustrated educators leading to many falling back to the more comfortable forms of traditional education (Abbitt, 2011). Hughes (2005) found it important for educators to find “technology-supported-pedagogy knowledge and skill base, which they can draw upon when planning to integrate technology into their teaching.” This support will help them “replace” the tasks they already are used to performing, “amplify” their students’

engagement, and “transform” their daily topics into more engaging activities to obtain the interest of their class.

Because of the knowledge professionals now have on student and educator needs, more trainings and workshops continuously develop year over year. At this point in the integration process, schools are at the “transformation” phase. There is a need to transform educators’ teaching to a more interactive and millennial focus curriculum (Johnson & Dasgupta, 2005; Ertmer, 2005). Workshops are continuously developed to educate teachers and provide integration materials needed to successfully welcome these technologies into daily classroom curriculum. In a 2003 study performed by the U.S. DOE, researchers found that 85% of educators now report feeling “somewhat well-prepared” in utilizing these technologies, “a notable increase since the 2000 report of the National Center for Education Statistics in which 53% of teachers reported feeling somewhat prepared.” In this study, researchers also found that “only 37% of teachers expressed interest in learning basic computer skills while over 80% expressed interest in learning how to integrate computer technology into curricular areas, suggesting the majority of current teachers have obtained minimum levels of technical competency.” Educators’ understanding of technologies has developed more balanced curriculum due to the understanding and ability to assist students intellectually with the resources at hand (Abbit, 2011; Clark et. al. 2012).

Clark et al. (2012) found that “educators need ongoing authentic (hands-on) professional development on technological integration into the classroom.” If educators expect “hands-on” training and communication to better understand classroom material, what makes them believe students learn more efficiently any other way? Youth are self-

driven and often find personal success in self-directed “exploration, in contrast to classroom learning that is oriented toward set, predefined goals” (Ito et. al. 2008). Just like their educators, students find a need to learn by doing. Do educators of both traditional and non-traditional beliefs find cultural commons with their students? This leads to the importance of studying attitudes, behaviors, and pedagogical beliefs of educators in the process of new media integration.

#### **ATTITUDES, BEHAVIORS, AND PEDAGOGICAL BELIEFS OF EDUCATORS**

Although educators now understand technologies found in classrooms, there seems to be a lack of understanding of the importance technology plays in the communication of the current student body (Bryner, 2013). Many researchers believe there is a lack of understanding educators’ pedagogical beliefs, which may lead to the imbalance witnessed in our education system (Anton, 2011; Clarke & Zagarell, 2012). In order to improve the integration process, one finds it necessary to take the next step in understanding what educators believe about this integration process in regards to their educational needs and student need, and will seek to create balance for these educators.

As in any other field of study or work, educators develop beliefs along their journey; these beliefs often shape their attitudes, behaviors, and pedagogical beliefs in classroom environments (Ertmer & Ottenbreit-Leftwich, 2010; Fedorov, 2013). Oftentimes educators become influential impacts (positive and/or negative) on the integration of education programs and the success they have with students. Some studies show that these beliefs and attitudes may play the largest role, not only in the integration of new educational studies, but also in the impact they have on each student (Lim et. al., 2008). Ertmer (2005) discussed the decisions educators make “whether and how to use

technology for instruction ultimately depends on the teachers themselves and the beliefs they hold.” Lim and Chai (2008) explain the importance of knowing that we have two types of teachers in our classrooms, the constructivists (non-traditional teachers), and the progressives (traditional teachers).

Both of these cultures of teachers are said to be at different spectrums of this integration process. Research is needed to find commonalities to bring them together. To successfully integrate new media technology into the classroom, schools need teachers who are willing to: work together, adapt to change, help each other learn new ways to better education, and willing to share a similar vision in the development of new pedagogical beliefs and standards (Abbit, 2011; Clarke & Zagarell, 2012). Only then will there be balance in education. Sharing this “vision of learning and teaching can serve as a driving force” for benefiting and lowering barriers in this new media usage within the classroom (Sandholtz et al., 1997; Tearle, 2004; K.F. Hew, 2006). Lim and Khine (2006) directly connect the importance of a “shared vision” in schools’ “technology integration plan” and related this “shared vision” to the increase in communication on how this form of education can be used, how it can help achieve goals, and how it provides educators with an avenue to help them along the way. Without a shared vision and understanding amongst educators, the steps to proper integration and success will continue to produce an imbalanced education system. One way to provide students with the most beneficial opportunities to be successful in this technological media based world is to find balance in the pedagogical and “technological divide” that exists in education cultures (Clarke et al., 2012).

Researchers and educators together found understanding in students, they gained the interest and support of decision makers, they have found better funding for new technology, and they have developed a better understanding of the needs for training front line educators. Researchers consistently find differences in traditional and non-traditional pedagogical beliefs, but little development has taken place to better understanding how these differences affect classrooms and integration. Many in depth studies find that “teacher technology use has increased, undoubtedly because of the increase level of access and skills, as well as the current favorable policy environment. However, although many teachers are using technology for numerous low level tasks, higher level uses are still very much in the minority” (e.g., Barron, Kemker, Harnes, & Kalaydjian, 2003). There is a need to study educators not as one culture but as two sub-cultures. This will help researchers better understand the spread of beliefs amongst educators. Ertmer (2005) found that “Teachers’ beliefs are much less understood and consequently, less readily resolved than the previous ‘issues’ presented.”

The researcher presents the notion that future research is needed on teachers’ cultural beliefs towards new media integration into schools. Due to the impact media has on every day life, it is important to explore how educators on both sides of the spectrum see and understand the ideas they have on this integration process and the shared ideas they have with their students. Researchers’ preconceived beliefs and knowledge in regards to educators needs to be utilized in a way to better education processes, but these same preconceived beliefs should be eliminated from researchers’ minds while interviewing and observing the obstacles these education systems witness in the move towards new media integration in the classroom. The pedagogical differences amongst

teachers needs to be observed in the form of educators' opinions to better understand where educators stand and to provide understanding of all educators in the form of new media technology integration.

#### **“THE MEDIUM IS THE MESSAGE:” A BRIEF INTRODUCTION TO MEDIA ECOLOGY**

In an effort to understand the study of media ecology one finds a need to break down each term. Ernst Haeckel, a German zoologist, defined the term ecology as “the interactions among the elements of our natural environment, with a special emphasis on how such interactions lead to a balanced and helpful environment.” Neil Postman in an address to the Media Ecology Association in New York addressed the term “media ecology” by demonstrating that “the way in which the interaction between media and human beings give a culture its character and, one might say, help a culture to maintain symbolic balance.” Throughout the developmental phases of this theory, many scholars have interpreted different meanings to coincide with each study, but Neil Postman introduced the final term “media ecology” with the inspiration of an early communication scholar Marshall McLuhan.

Media ecology explores the cultural environments in which we live and the ecological relationships involved (Biernatski, 2004). This is a field of inquiry rather than a specified rule of theories. Media ecology was coined a theory to understand the effects of media in the environments of society in the late 60s. During this time there was great technological development, but the growth was incremental. The introduction of the digital age exacerbated the development of media ecology, but soon found itself as the background music of larger events of technological growth. The mid to late 90s brought tremendous growth to the digital age, such growth that society could not keep up, and the

fight many originally put forth to new machines, was left at the door. These technologies became apart of everyday life; tools society cannot live with out, almost creating a way of life. Now more so than ever does media ecology play a larger role in traditional environments daily.

Marshall McLuhan developed this theory with groundwork based on “the medium is the message.” The mediums in this statement are the technologies, or even societies.

McLuhan explains his statement:

“in terms of the electronic age, that a totally new environment has been created.

The ‘content’ of this new environment is the old mechanized environment of the industrial age. The new environment reprocesses the old one as radically as TV is reprocessing the film. For the ‘content’ of TV is the movie. TV is environmental and imperceptible, like all environments. We are aware only of the “content” or the old environment. When machine production was new, it gradually created an environment who’s content was the old environment of agrarian life and the arts and crafts. This older environment was elevated to an art form by the new mechanical environment. The machine turned nature into an art form

(Understanding Media, 2003).

With this statement in mind, Postman defined media ecology as “the study of media as environments” (Postman, 1970). In this definition he explains that the main focus is “how media of communication affect human perception, understanding, feeling, and value; and how our interactions with media facilitates or impedes our chances of survival. The word ecology implies the study of environments: their structure, content, and impact on people” (p. 161).



Media is found in every industry and most recently has been fully introduced into education economies. In the study of educational cultures, I seek to use Postman's description of media ecology in another way, similar but different to what he has previously produced. He presents the notion that media ecology is "the study of transactions among people, their messages, and their message systems" (p. 139).

Traditional education was developed with an educator centric culture whereas new media technology seeks to develop a student centric culture. Do either one of these play bigger roles than the other? Media has become an environment that is or originally was used to compliment the traditional education environment. In a dissertation by Christine Nystrom's she explained media ecology as a "perspective, or emerging metadiscipline broadly defined as the study of complex communication systems as environments" and distressed with "the interactions of communications media, technology, technique, and processes with human feeling, thought, value, and behavior" (p. 3). The understanding of these studies will be used to interpret the data found by my surveys to suggest beneficial ways to strengthen sustainable learning communities in both traditional and virtual education communities.

#### **A BRIEF HISTORY IN TRADITIONAL EDUCATION**

Traditional education continuously evolved throughout many decades. What is traditional today is not what was communicated and/or understood decades prior to current institutions. Constant disconnect lies in the understanding of communication within education between parents and students, educators and students, and amongst educators themselves. Where did the traditional education system of mathematical, social, economical, and rhetoric teaching begin?

Education as an institution stems back to the early teachings of religion within social communities during the development of early civilizations. The education thought about today stems back to the early 1600s when “English settlers in North America,” realized “the cultivation of skills and the transmission of culture” (Dictionary, 2003) were of high importance and needing understanding.

This form of education was directed by a “master” who often times had little to no structural training themselves, and was rarely available to many. The “Dictionary of American History, 2003” suggests that issues in schools have never been properly addressed. In 1647, Massachusetts was the first state to enact an educational law “requiring towns of fifty families to establish a school, to confound the “Old Deluder Satan” in his never-ending quest to lead Christians astray.” Many states soon enacted similar laws. Numerous schools contained no more than one classroom with an array of children from various backgrounds and at various levels of intelligence, social maturity, and mathematical understanding.

In the years to follow, continuous community development was seen within education, sometimes very slow and at others too fast to understand. Single classroom schools with little to no resources became multi classroom schools consisting of different age groups, different genders, elimination of racial segregation, paper, pencils, and many more resources. The figure of the “master” still sits in the minds of many when debating traditional education with an educator centered pedagogical curriculum.

Reforms of education have been witnessed throughout history, most noticeably in the nineteenth and twentieth century education systems (Cremin, 1988). Early reforms of the nineteenth century debated over the “haphazard training of teachers, the short terms

squeezed between harvest and planting seasons, and the chance provision of such basic school supplies as books and firewood” (Knopf, 1961). They often stressed the growth of diversity within American society and the understanding of possible social conflict in the “absence of common values and a shared identity” (Cremin, 1970). Similar to the nineteenth century, the twentieth century started with a tremendous focus on reform efforts with a progressive education in mind. Along with progressive reform, schools with less idealistic views reformed the “issues of efficiency and carefully aligning the purposes of schooling with the needs of the economy” (Rury, 2002).

Although many wish answers have been found for each and every reform effort of our ancestors, the realization brought to light is many of those issues are still faced today. Despite the growth of school systems, the influx of resources, and the education of educators, issues have not been resolved; more have been brought to light. Classrooms are still over filled, up to date resources are often times not at the fingertips of educators and students, and too much of the education process is left to the discretion of the government, not the institution of education or educators themselves. These are the issues we see in the public eye. One aspect often left out of debate, which was seen within the early institutions is the importance of communities within society and education. The importance of teaching communities to better and more “efficiently” develop students at every stage of their lives; teachers, children, parents, law makers, and professionals, etc.

#### **DIALING IN ON NEW MEDIA INTEGRATION**

Postman’s study of media ecology presents the notion that media technology plays an integral part in society and cannot be overlooked; more so, it should be used as an ecological learning tool to balance education systems (Postman, 1992). Findings show

there are two cultures of educators: traditional educators who favor mechanistic approaches to teaching, and utilize the bare minimum media technology in their classrooms (i.e. PowerPoint and Internet) and non-traditional “virtual” educators who favor an ecological approach to teaching and spend most of their time teaching through various media devices (i.e. iPads, Laptops, Apps, etc.) (Ertmer & Ottenbreit-Leftwich 2010; Lim & Chai 2008; Hew & Brush 2006). This study explores the cultural commons between these two communication styles and seeks to present future researchers with suggestions on how to create a more sustainable media ecosystem in the classroom. Future research will highlight areas of improvement needed for creating a more cohesive integration program for all educators.

Increased usage of new media technology amongst the millennials, anyone born between 1982 and 2000, increased the importance of new media integration in K-12 education. Researchers often find ease in locating information about this new era of learning and its effects on students, but prior to studying the outcome this form of education has on students, it is important to understand the cultural commons found on each side of the spectrum, in an effort to create balance within schools. Lim and Chai (2008) found a direct correlation between educators’ decisions based on pedagogical beliefs and the effectiveness and influence they have in learning environments. Lim and Chai lead us to explore the beliefs of pedagogical structure amongst these educators to create better understanding of these two cultures. Lim and Chai asserted that although many studies highlight the impact of “teachers’ pedagogical beliefs on their classroom practices, more empirical studies are needed to examine whether these beliefs have an

impact on the teaching and learning practices” (4) in technologically mediated learning environments.

Hew and Brush (2006), reported the major issues in our education system, in reference to new media integration are: the lack of resources, lack of technical knowledge and skills of the educators, and lastly, the attitudes and behaviors educators poses. Of these issues, researchers have found balance in most institutions, however, the lack of understanding researchers convey on the educators beliefs and attitudes on this topic has often led to questioning the abilities and wants to leverage technology as “meaningful pedagogical tools” by educators (Ertmer & Ottenbreit-Leftwich 2010). There is a need to understand the knowledge of technology educators’ poses and the cultural beliefs of educators on both sides of the spectrum.

This preliminary study explores the cultural commons in virtual and traditional education through a media ecology approach. This approach is optimal for the following reasons: 1) the understanding that education has become a culture in itself and the reality that there are two sub-cultures amongst educators (traditional and virtual). 2) Because of the understanding that new media technology continuously increases in importance in every aspect of the education ecosystem year over year. 3) Lastly, for the opportunity to speak on behalf of educators, I will attempt to understand and express the difference in relationships in an effort to disrupt any inequalities or barriers provided by educators of different cultural beliefs. It is important to study these educators in their primary environment to obtain the most accurate reading of their classroom beliefs.

The traditional education system is under the microscope and requires change.

When changes are not adopted properly, uncertainty for educators and their classroom

ecosystems is (Virtual Schools, 2013). Education currently serves as a sore topic in the American culture and research is needed from all aspects of the classroom. The effectiveness of teachers as presented by many students helps mold the attitudes of the students they teach. It is important to engage students (Bryner 2007; Ertmer 2005), and understanding where educators stand and utilizing this information to create balance between these two cultures will prove beneficial to the success of the ecosystem found in schools and to the development of future media communication and pedagogical research. My research will not limit me to the findings previous research has obtained; by understanding educators beliefs, I will go beyond what my predecessors have developed and provide suggestions I deem necessary to creating a more effective and sustainable media ecosystem in the classroom.

### **Current Study**

This preliminary study explores the cultural commons in virtual and traditional education through a media ecology approach. This approach is chosen because there are two sub-cultures amongst educators (i.e., traditional and non-traditional “virtual”) existing in an educational culture that constantly faces the development and integration of new media technology. Hopefully, the implications will increase our understanding of this communication phenomenon, as well as provide insight into these distinct subcultures and the view, beliefs, and approaches of those members within. A core objective here is to use findings from the present study to suggest necessary and sustainable changes for improving the media ecosystem utilizing the lens of media ecology in the classroom.

Using media ecology and cultural commons as a framework for studying the technology ecosystem existing in secondary education, the following research questions are proposed:

- RQ1: What are the cultural commons of traditional vs. non-traditional educators within secondary schools of San Antonio, Texas?
- RQ2: How do secondary educators on both sides of the spectrum see and understand the space of ideas they share?
- RQ3: How do secondary educators create a media ecosystem in their own teaching environments?

### **APPROACH**

This is an exploratory proposal. The researcher conducted a preliminary survey to look at the advantages and disadvantages that teachers see in the use of media technology

in the classroom. Cultural commons and possible demographic findings will be the bases for suggesting future research.

This study transpired with the approach of media ecology at the forefront. This theory was utilized to conduct this qualitative research. This approach was chosen for a few reasons: 1) the understanding that education has become a culture in itself and the reality that there are two sub-cultures among our educators (traditional and non-traditional). 2) Because of the potential biases which arises from these educators, and the want to understand them within their classroom environments. 3) Lastly, for the opportunity to speak on behalf of educators, the researcher attempted to understand and express the difference in relationships in an effort to disrupt any inequalities or barriers provided by educators of different pedagogical cultures. This approach was the best to take in this research because of the researcher's want to understand each culture in various classroom environments and the want to understand how these cultures create a sustainable learning experience whether traditional or non-traditional. I do not seek to change any of their ways of teaching or to utilize steps I or any other researchers see more beneficial. It is important that one studies these educators' cultural patterns and perspectives in their natural settings.



## **Methods**

A preliminary qualitative critical research developed on the bases of a narrative research study. Primary & secondary textual analysis was conducted based in a survey analysis of the information provided by current educators in both traditional and non-traditional environments. The category of “cultural commons” will be utilized to analyze these research findings. These findings will be interpreted from the perspective of media ecology.

### **PARTICIPANTS AND PROCEDURES**

Participants include educators from Economics, English, Science, Technology, and extra curricular backgrounds. In some instances educators teaching the same course work were on separate sides of the spectrum and also shared some commonalities. The study found that most science and surprisingly technology educators leaned more towards the traditional paradigm where English teachers differed from each other in their thoughts on the development of student critical schools and how some felt technology impeded these developmental processes and some felt it could help strengthen this development.

The final sample included 10 individuals (5 males and 5 females) currently teaching at the secondary level. This survey found that more males tended towards a non-traditional pedagogy while more females favored traditional pedagogy. Although this was evident in this study, the researcher feels the ages played a larger role in the sides of the spectrum they participated in. Participants ranged in ages from 27 to 55 years old. Seventy-five percent of participants were over the age of 40. Non-traditional educators were between twenty and forty years of age where as 100% of traditional educators were over the age of forty.

The primary schools sought for this study were secondary schools in the San Antonio, Texas area. The researcher obtained permission by superintendents of two of the most up to date school districts within the city when it comes to media technology in the classroom and/or at the hands of each educator. Within this site, the researcher sought to find three of each type of educator within the district to survey. The survey was distributed as an open sample to thirty educators. The researcher found it important to allow the educators to take the survey where they felt more comfortable, so he distributed this survey through email. Out of the thirty surveys distributed, twelve were returned, and ten were properly filled out to sit as samples in this research. The two that were left out were not filled out to the entirety and did not provide information that would benefit this research study.

The researcher chose two highly sought after school districts in San Antonio, Texas. These two districts were chosen because of their development academically and their continuous strive to stay above the technological curve. The Senior Director of Technology Services at one school district provided the researcher with data showing their move towards a more diverse education system in regards to traditional and non-traditional ways of teaching. In a 2011 bond for this school district, they received sixty-four million dollars, which allowed them to establish classroom technology standards in regards to student access to instructional technology. Educators utilized existing technology inventories and received the following for instructional usage in their classrooms:

- 1) One interactive whiteboard
- 2) One document camera
- 3) No less than three iPads

In addition to the expected technology in each classroom, each campus is in the process of receiving access to a computer lab and mobile carts, which will contain laptop computers and Google Chromebooks. Along with the access of these technologies in each classroom, both sites have ventured to the opportunities of virtual education for students and educators. One school researched is dedicated to the sciences, technology, engineering, and mathematics, this school utilizes more technologies than the traditional systems researched, and was sought out to be a good conductor of non-traditional respondents.

This research started with the cooperation of the superintendent of two school districts in San Antonio, TX., and with their approval, the researcher was able to start communication with the principals of each school surveyed. Participants were established with one of two methods: 1) The cooperation of the leadership within each school for the balance between traditional and non-traditional educators and the opportunity provided to contact a few of each type of teacher to create a diverse sample (this will be based off of previous observations from the schools leadership team), or 2) once approved and acceptance was granted by each leader, the researcher sought permission to send his survey to educators to ensure he obtained a proper understanding of each educator and picked a true representation of the education system.

## **MEASURES**

The researcher conducted a random sampling of educators and distinguished which category they fell under based on the amount of media usage in each classroom to differentiate traditional and non-traditional educators. This study assessed the situation and viewpoints of both traditional and non-traditional educators in two school systems,

by sampling 10 educators randomly who have been exposed to the tools utilized in both aspects of teaching. Survey questions were developed to better understand these educators' beliefs about technology in the classroom, what are their issues with introducing technology into their classrooms, how they differ from one another (traditional and non-traditional educators), and how to find cultural commons between them. The researcher sought understanding of each educator's pedagogical belief and interpreted this data to present an understanding of the necessities to creating future research leading to a sustainable media ecosystem within the classroom.

Originally the researcher sought to utilize the types of technology utilized in class to differentiate traditional educators from non-traditional educators, but found that to be a poor representation of which side of the spectrum each tended toward. The researcher adjusted after analyzing the surveys. Traditional educators in this study were those that utilize media technology more than fifteen times a month and those that utilized these technologies less than fifteen times a month were categorized as traditional educators. Educators of these statistics documented their style of teaching just as the researcher envisioned.

## **Analysis and Results**

The imbalance within education as a whole and the cultures this study focused on proved evident throughout the surveys collected. One educator stated, "Nothing in education is balanced as long as it is a bureaucracy." Although this statement shows stronger emphasis on education as a whole, it provides a picture of the education system and the lack of support educators feel within each other, amongst officials, elected or not, and the issues consistently at the forefront of education news. This study found a new understanding of the educators' beliefs, many very similar, and can be utilized for further research within the field of traditional and non-traditional education communities.

In this section, the researcher will provide an overview of the findings of a survey provided to a random sample of educators. The survey findings are divided into three sections; media ecology, types of thinking, and cultural commons. One main question will be further understood; how can we find cultural commons in traditional and non-traditional educators within 9-12 classrooms in high schools within San Antonio, Texas. After this, the two fundamental goals that drove the collection of data will be evaluated. Those goals were to find understanding on how educators on both sides of the spectrum see and understand the space of ideas they share, and second, how do these educators create a media ecosystem in their own environments. These goals were achieved, and the researcher feels further research needs to be conducted to better understand and impact beneficially the media ecosystems within schools.

### **MEDIA ECOLOGY**

The survey developed six questions to better understand each educator's beliefs and to find the commonalities in their beliefs and their differences. These questions were

created to build framework to create a balance between the two cultures within schools. Although educators utilize media differently and at different frequencies, both sides of the spectrum shared many common beliefs. When asked “what do you see as being the advantage of using media in the classroom,” each side found multiple educators explaining that this generation the “click and get generation” finds more engagement when being taught with new media technologies and apps. One traditional educator stated that this form of teaching is more “appealing for students and engaging” and a non-traditional educator said it “promotes (a) more efficient way of learning for many students and puts different learning styles on one medium.” Respondents’ differences were seen in the elaboration of responses each type of educator provided when asked this question. Traditional educators tended to be more to the point as a simple “engagement” where non-traditional educators would give a full statement such as “kids are more engaged. It makes us/our class more relevant to them. It connects to them in a way that they are interested in and familiar with.

When asked about the disadvantages to media in education, 100% of respondents brought up the fact that they need more availability and support. Based on the research previously explored, the researcher thought that this was controlled, but the findings illustrate this is still an issue that needs to be watched. Educators on both sides of the spectrum reiterated this multiple times throughout their survey and interviews. One stated that they can’t be “reliant on a device and a network that does not always perform; lack availability.” Another respondent stated, “Some updates don’t come fast enough. Support isn’t always available.” Although all respondents said this situation improved over the

past five years, they stated that administrators should keep this at the forefront of integration talks.

The divide in cultures showed in the question about how media integration can be beneficial in students' transition into the real world. Two non-traditional educators stated that this "is the future of careers... everything is headed in that direction. So, they will be practicing for the future. Also, they are staying with the times," another stated, "It helps students with important life skills, also with things like organization. Most careers deal with some type of media technology on a regular basis." In contrast, although sounding similar in some beliefs, traditional educators were a little more hesitant while answering. One educator said "Techno-savvy kids can get techno-savvy jobs," another expressed concern stating, "for the English classroom it can be hard to integrate unless you are integrating grammar lessons or lecture. Real world careers? Well, I've been in sales and teaching. In sales there are spreadsheets to analyze and the company can meet virtually, but it still comes down to having social skills. And in teaching, we still have to have social skills and relationships with students. This doesn't happen on an app."

#### **TYPES OF THINKING**

The next step was to find understanding on where educators on both sides of the spectrum felt that non-traditional and traditional environments fell in respects of mechanistic thinking and ecological thinking. Researchers need to know that educators were made aware that Mechanistic thinking assumes environmental objects around us are to be utilized or function more as machines than a part of life and ecological thinking develops when something is created that becomes necessary for us to survive and have to

be sufficient on earth for years to come (Mike H., 2009). Both of these forms have been found to play a role whether subconsciously or consciously in educators' environments.

The survey posed two questions; "would you agree with the idea that a virtual education environment promotes a mechanistic thinking?" and "Would you agree with the idea that a traditional education environment promotes a more balance and sustainable (ecological) thinking?" The responses from both non-traditional and traditional educators shared similarities. In regards to the first question, all respondents answered "no." One non-traditional educator responded by saying, "I feel technology – to an extent – is becoming necessary for us to be sufficient. While it isn't quite to that extreme yet, we are quickly headed in that direction." One traditional educator answered, "I'm taking this survey aren't I? We're discussing using media technology in the classroom because they believe it can reach students. We're coming to the age that the virtual educational environment is a must and that most students and most teachers can't survive without it – is that mechanistic thinking? The apps, i-pads, etc, aren't being utilized as machines but almost become necessary to survive." The responses to the second question were shared as well. Each educator found that the belief of ecological thinking depended on the understanding of each student's learning habits. One non-traditional educator responded to this question stating, "Tough to pick a definitive answer on this one! Currently, I would say yes, but we are forging new paths, which will allow so many more/different – learning opportunities. I feel that traditional education environment will become obsolete. We (teachers) have to change and adapt with the times, or our students will not need what we can offer (other than the personal connection)."



## CULTURAL COMMONS

Lastly, the researcher sought further understanding of cultural commons between traditional and non-traditional educators. This section starts with understanding the differences between the two and concludes with the similarities both see in their perspective cultures.

This section started off by asking, “what are the main differences of teaching in a virtual environment as opposed to a traditional environment?” Two educators, one on each side of the spectrum shared the beliefs of their fellow educators with common beliefs. A non-traditional educator explained, “One has teachers trying new things while the other keeps them in their comfort zone. One is relevant while the other is becoming obsolete. One requires students to have access to electronics to be successful; in the other students need nothing additional to participate.” When asked the same questions, a traditional educator explained, “Virtual gives students, and the teacher, flexibility to not go to a classroom. This is beneficial for students who are sick and students who don’t do well in a classroom setting.” This question was followed with, “What are the main differences of teaching in a traditional environment as opposed to a virtual environment?” Educators on both sides shared the common belief that “Traditional promotes a more direct teacher-student learning relationship and more class management.” When asked about the similarities, the answers were short and to the point. Educators on both sides believe they need to find a way to keep students engaged as well as educators engaged and learning, they also believe that both should continue to utilize the teacher as a facilitator or learning. Lastly they all touched on the fact that either way, the outcome of the students’ education needs to be at the forefront of all change.

### **Discussion and Future Directions**

The results of the current investigation brought new insight into how educators see the space they share and the importance they see in new media integration into classrooms. First, the data found importance in techno-centric teaching by teachers on both sides of the spectrum with some leaning towards heavier integration and some believing it depended on courses being taught. Second, findings demonstrated understanding by educators that they have students who learn differently and the ability technology has to benefit students by the masses. Lastly, the importance of a cooperative system, 50/50 blend of non-traditional and traditional curriculum within classrooms was realized. 100% of teachers surveyed agreed without this blend, students would not be provided with the best education. Educators need to find ways to find curriculum that benefits the majority of teaching style and the 50/50 blend was agreed upon by each educator.

### **THE ROLE AND NATURE OF TECHNO-CENTRIC TEACHING**

Educators, both traditional and non-traditional, share understanding on the importance of finding common ground within the classroom for both students and educators. The findings in this study show that the way educators tend to lean is associated more with their comfort ability than anything else. Education changed drastically over the past ten years and tends to change faster and faster every year.

This research was first set out to find the commonalities between these educators. As discussed above, no matter what side of the spectrum an educators sits on, they all understand that media in the classroom is a way to keep students engaged. They each believe there is a balance, which has yet to be found, in effectively integrating these

technologies and media resources without ridding students of the importance of “social and critical thinking skills.” “The benefit is to use it (media technology) as a tool and not let it take over teaching.” When asked how to create a sustainable learning experience, many educators agreed with one another, “Incorporate technology into the traditional environment. Try a flipped classroom. Plan meticulously to get the most out of both systems and have them blended seamlessly.” Second, most agreed on the fact that “in order for the students to learn the same skills such as writing and critical thinking, there has to be constant communication. Additionally, each educator feels better support with technology in the classroom needs to be improved tremendously. Technology changes rapidly and school districts often find themselves behind the curve of obtaining new resources and providing educators with proper education on how to transition these resources into their curriculum.

### **EDUCATING THE MASSES**

The researcher sought to find how educators create a media ecosystem in their own environments. Although, the educators did not directly answer this, the researcher found understanding of each. Many non-traditional educators believe that the education process should be developed with many learning styles in mind. They often suggested that there is no right or wrong with media integration, but focused on the benefits encompassed in its ability to be adjusted to fit each child’s needs. Whereas the traditional educators understand that classroom needs should be adjusted to each student’s learning style, their answers often revolved around the notion that media education takes the personalized touch and capability of students to learn common social and critical skills out of the classroom. With the understanding of the “click and get” generation each

educator brought to the forefront, they all believe a blended system will help reach a greater sample of student.

### **CREATING COOPERATIVE EDUCATORS**

This research found that each educator felt a 50/50 blend of non-traditional and traditional curriculum need to be met. However, educators do not feel comfortable enough or supported to make this happen. After talking to educators the researcher feels what they are looking for is a cooperative education experience where traditional and non-traditional educators work closely to create a balanced system within their classroom settings. In a cooperative education setting two teachers of the same subject but different strengths in traditional and non-traditional teaching will be paired up. They will work to create a blended experience for their classrooms. This will help educators learn from one another, will allow them to feel more comfortable within the new technological tools, and feel they have more immediate support. This could happen in the same class or in two different classes with the use of technological tools to record and broadcast from across the hall. Teachers utilizing this cooperative method should work closely to develop the curriculum and should communicate often and effectively to ensure they are adjusting to each other and to their classes. This balance is what media ecology seeks to find, educators know technology is becoming more a part of education than ever before, and this is the way to take control of these new classroom environment.

### **LIMITATIONS**

The current investigations focused the cultural commons in non-traditional and traditional secondary education. Challenges, limitations, and opportunities for future studies emerged. First, with only a few months to produce information and conduct

surveys the researcher found it hard to capture all areas of high school education. It will prove beneficial for future research to treat this topic as a long-term study.

Additionally, the researcher understands that his and his participants' preconceived beliefs on this topic may have altered the outcome of research produced. Although a conscious effort went into creating a survey with open and broad questions to capture the true beliefs of educators, human error and awareness of the subtle questions, which may guide survey participants to say what they believe the researcher wants to hear is understood. Due to human nature, the researcher has tied in the notion of reactivity into this study. Educators hold strong pedagogical beliefs, some welcome technology/new media into the classroom and the non-traditional approach and some strongly oppose it. The researcher realizes technology continuously develops year over year, and either it can be ignored or can become the way to create a successful and sustainable environment within schools.

Additionally, in order to dive deeper into the surveys, future research should seek follow up interviews with educators. This will help better understand each educator's perspective and to clarify what each educator was trying to express. This may have allowed the educator to utilize the two surveys, which had to be disregarded due to a lack of understanding of one educators writing and one educators message.

With the findings of this research, suggestions for future studies were made to obtain a greater sample size of K-12 educators. The inclusion of teachers in a "blended" environment (non-traditional and traditional) is recommended.

## **SUGGESTIONS FOR FUTURE RESEARCH**

This preliminary study developed with the intention to provide future researchers and the current researcher with developmental tools for future research. The findings show two cultures dedicated to one outcome. 100% of respondents believe a 50/50 blend within the classroom is the best way to ensure all learning styles are met and all students stay engaged. Although they share understanding of where education is going and where students expect it to go, some are willing to take a chance and embark on the new journey with as much ease as possible, where others don't find it as easy to step out of their comfort zone.

What is necessary to create a sustainable media ecosystem within the classroom with the lens of media ecology? The researcher suggests the implementation of shared classrooms. Pairing non-traditional and traditional educators together will help in the development of educators traditional and non-traditional while strengthening the education experience for students. This allows those educators with strong understanding of media technologies to work closely with those who lack previous exposure. Educators should spend at least one year creating curriculum. Each educator should agree on the proposed curriculum. Their goal should be to create an environment that displays curriculum with the best of both worlds at the forefront. The key to this process is planning and communicating; only with proper preparation and dedication will educators be able to utilize "both systems and have them blend seamlessly" (educator surveyed). This should be a long-term, possibly four-year, research topic.

The researcher leaves us with information for future researchers to keep in mind while developing their topics; this informative statement was made by an educator

surveyed in this study and leads the researcher to believe it can help develop future studies on this topic, “I believe as a young child it is detrimental to a student’s learning – children need to know how to communicate face to face; however, for high school students and beyond it is an amazing tool especially for research.” Is there a time and place to start utilizing these technologies?

## CONCLUSION

Utilizing the scope of media ecology, the researcher found information relevant to the improvement of media ecosystems within schools. The participants of this study all shared the belief that media is becoming a way of life rather than a tool. Media will continue to play a larger role in the process of education and cannot be overlooked. Educators on both sides of the spectrum, traditional and non-traditional, share many common goals; i.e. to create engaging environments for students, to incorporate technology where they feel applicable, and to make what they are teaching relevant to the “click and get” generation. However, educators on either side of the spectrum embark on different paths to reach these goals. With the understanding each educator has of where education, students, and the world are going, the importance of media integration is significant. Educators working together to form curriculum with each other’s strengths in mind will allow more collaboration between educators of 9-12 education. The improvement of technology and tech support within schools and the overall training of these programs need to be at the forefront. Educators who are not enthusiastic about these systems will sit back as long as they can if not provided with proper support. This is fixed with the ability to pair educators together and to provide not only them with a more sustainable and cooperative environment, but providing the students as well with this

improved environment while still allowing the strong face-to-face education both sides of the spectrum believe is necessary.



## Appendices

### APPENDIX A: Survey

Name: (OPTIONAL) \_\_\_\_\_

School:(OPTIONAL) \_\_\_\_\_

Level \_\_\_\_\_

Years of experience \_\_\_\_\_

This is an exploratory study to find understanding on how teachers use media technology in their classrooms. My purpose is to look at the challenges they see in the future of media technology and education to suggest ways to strengthen sustainable learning communities within schools.

### FIRST PART

#### Demographics:

1) Are you Male or Female? (Circle one)

2) What is your age? (Circle one)

20 – 30

30 – 40

40 – 50

Over 50

3) What is the highest level of education you have completed? (Circle one)

Bachelors

Masters

Ph.D.

4) What is your ethnicity? (Check one)

White

\_\_\_\_\_

White (Non-Hispanic) \_\_\_\_\_

African-American

\_\_\_\_\_

Hispanic

\_\_\_\_\_

Asian Pacific Islander \_\_\_\_\_

Native American

\_\_\_\_\_

Other: \_\_\_\_\_ (Specify)

5) What classes do you teach?

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7) Do you teach the above-mentioned classes in a traditional, virtual or blended system?  
(Circle one or more)

(Survey Continued)

### **ON MEDIA ECOLOGY**

Do you utilize media technology in the classroom? \_\_\_\_\_ If so, how?

How frequently do you use new media (facebook, apps, iPad, tablets, etc)?

What do you see as being the advantages of using media in the classroom?

What do you see as being the disadvantages in the use of media in the classroom?

How do you believe the integration of new media in the classroom affects students in their learning process (explain why you believe this)?

How can media integration such as virtual classrooms or iPad apps help students transition what they learn in the classroom into real world careers?

### **TYPES OF THINKING:**

Would you agree with the idea that a virtual education environment promotes a mechanistic thinking (see definition below)?\* Yes \_\_\_\_\_ No \_\_\_\_\_ Why?

Would you agree with the idea that a traditional education environment promotes a more balanced and sustainable (ecological) thinking (see definition below)?\* Yes \_\_\_\_\_ No \_\_\_\_\_ Why?

\* Mechanistic thinking assumes environmental objects around us are to be utilized or function more as machines than a part of life. Ecological Thinking develops when something is created that becomes necessary for us to survive and have to be sufficient on earth for years to come (Mike H., 2009). Both of these forms have been found to play a role whether subconsciously or consciously in educators' environments.

### **ON CULTURAL COMMONS:**

In your opinion, what are the main differences of teaching in a virtual environment as opposed to a traditional environment?

What are the main differences of teaching in a traditional environment as opposed to a virtual environment?

What are some similarities?

What would be the right blend between virtual and traditional education?

### **THE FUTURE OF MEDIA TECHNOLOGY AND EDUCATION**

In your opinion, what would benefit the future of education in terms of utilizing media technology in education?

What needs to be changed and why?

6) Do you have a media studies background (Y/N) \_\_\_\_\_. If Yes, explain

## APPENDIX B: Glossary

The following definitions are provided to ensure understanding of terms used throughout the study. The researcher developed all definitions with the assistance of referenced materials, which are indicated within this section.

**Didactic Teaching:** Reference.com refers to didactic teaching methods as the “traditional pedagogy of teacher-centered” education strategies. This idea of teaching is to have the students and educators familiar with specific models of understanding at the same time, but recommends student discussion to not start until after the lesson is delivered. They state “modern teaching methods which give the students more freedom now works differently than this once student-centered ideas.”

**Ecological Thinking:** This form of thinking develops when something is created that becomes necessary for us to survive and have to be sufficient on earth for years to come (Mike H., 2009).

**Mechanistic Paradigm (Thinking):** This form of thinking assumes environmental objects around us are to be utilized or function more as machines than a part of life.

(Glossary Continued)

**Millennials:** The students at the forefront of our education system for over two decades are considered “Millennials.” The earlier representatives of this classification saw the growth of technology in our lives, but often times did not have computers in their household until high school and didn’t have their first cellular phones until college. The earlier generation utilized encyclopedias for research, typed papers on typewriters, and often times had to find a landline to return a call they received on their pager. The later part of this classified group grew up with computers in the household along with cellular phones as early as elementary. Many adapted with the growth of technology in schools and at home, it wasn’t till the early millennium that social networking truly started; MySpace came to us in 2003, and Facebook followed shortly after in early 2004. The dynamics technology plays in the lives of this generation and even in the lives of the generations ahead often prove the need for education on these products.

**Non-traditional Educator:** These educators are those that current students are seeing more and more often. Whether taking an online class or sitting in a classroom utilizing iPads, iPhones, or other technological devices, these educators seek to incorporate more of a hands on learning experience for students. This form of education is “centered on the students where they are actively involved in the learning curve and the teacher has been transformed to a facilitator, no longer the main source of information” (Elpidio Estiko).

(Glossary Continued)

**Pedagogical Beliefs:** These beliefs are often developed along the journey of becoming a teacher. Most educators develop them throughout their education and classroom experience. Pedagogical Beliefs as defined by Lim and Chai (2008), are the beliefs of a teacher about teaching and learning.

**Traditional Educators:** The traditional teacher is the one that many of us grew up with. These teachers often lead the learning process. Often times this approach to teaching is “teacher-oriented, mostly lectures, learning is passive, confined mostly in the classroom, and students look at the teacher as the main source of information” (Elpidio Estiko, M.A. Mass Communications and San Jose Education Examiner). These educators utilize technology, but not as a strong basis of learning.

**APPENDIX C: Differences between traditional and constructivist models of education**

Dimensions of comparison	Traditional Model	Constructivist Model
Teacher's Roles	Expert, transmitter of knowledge, director of structured experiences.	Co-constructor, facilitator, guide, coach, designer of authentic experiences
Teaching Style	Didactic dissemination of required information	Interactive/Dialogic pursuit of questions valued by students
Student's Roles	Passive recipient of knowledge, learn the given and reproduce appropriate performances	Active and collaborative constructor of knowledge construction, develop competence
Curriculum Characteristics	Hierarchical, sequential, static and nonresponsive	Based on projects/Problems that drive learning of relevant skills and information responsive and dynamic
Learning goals	Stated in terms of mastery of knowledge and facts and demonstration of behavioral competence	Stated in terms of growth or ability of learners to construct or co-construct knowledge
Types of lessons	Lecture, recitation, seatwork, test and examination	Group project, hands-on experimentation, search and synthesis information, presentation
Roles of computers	Instructive tools such as tutorial software, drill-and-practice	Informative, constructive, communicative
Assessment strategies	Written test and end products, summative in nature	Performance tests and portfolios, formative in nature

Lim and Chai (2008) adapted from Brooks (2002); Chen and Hung (2003); Roblyer (2003); and Samuelowicz and Bain (2001)

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